

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/018392

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁷ D01F6/74, 6/94

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl⁷ D01F6/74, 6/94Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1926-1996 Toroku Jitsuyo Shinan Koho 1994-2005
Kokai Jitsuyo Shinan Koho 1971-2005 Jitsuyo Shinan Toroku Koho 1996-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| X | JP 8-27623 A (Toyobo Co., Ltd.), 30 January, 1996 (30.01.96), Claims; Par. No. [0018]; examples (Family: none) | 1-14 |
| A | JP 2003-213127 A (Toyobo Co., Ltd.), 30 July, 2003 (30.07.03), Claims (Family: none) | 1-14 |
| A | JP 8-226080 A (Toyobo Co., Ltd.), 03 September, 1996 (03.09.96), Claims & US 5552221 A | 1-14 |

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

| | |
|---|--|
| * Special categories of cited documents: | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" earlier application or patent but published on or after the international filing date | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family |
| "O" document referring to an oral disclosure, use, exhibition or other means | |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search
04 March, 2005 (04.03.05)Date of mailing of the international search report
22 March, 2005 (22.03.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| A | 'COLOUR INDEX THIRD EDITION VOLUME 4', 1971, THE SOCIETY OF DYERS AND COLOURISTS, PAGE 4618 | 1-14 |
| P,X | JP 2004-27431 A (Toyobo Co., Ltd.), 29 January, 2004 (29.01.04), Claims (Family: none) | 1-14 |

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Claim 1 relates to a polybenzazole fiber which is specified by the matter "the value of strength retention (%) defined by $(a/b) \times 100$ is 80% or higher." Claim 1 involves all fibers having this property. However, the fibers which are disclosed in the meaning of Article 5 of the PCT are limited to the polybenzazole fiber "which contains a specific amount of an organic pigment which has such high heat resistance that its heat decomposition temperature is 200°C or higher and which is soluble in a mineral acid, preferably". The fiber claimed is considered to lack a support by the description in the meaning of Article 6 of the PCT.

The term "polybenzazole fiber in which the value of strength retention (%) defined by $(a/b) \times 100$ is 80% or higher" cannot specify the scope of fibers having this material property even when technical common sense at the time of the filing of this application is taken into account. Consequently, claim 1 does not comply with the requirement of clearness in the meaning of Article 6 of the PCT.

Therefore, a search for claim 1 and the parts in which claim 1 is cited was made with respect to the fiber which is a "polybenzazole fiber in which the value of strength retention (%) defined by $(a/b) \times 100$ is 80% or higher" and which contains the ingredient shown in claim 5, as specifically disclosed in the description. Furthermore, a complete search was made with respect to claim 5.